

## REMARKS

Applicants acknowledge allowance of claims 35-39.

Claims 1, 12, 24, 41 and 42 have been amended to correct errors and for purposes of clarification and definiteness and thereby to more correctly claim the invention that is the subject of this application.

New claims 47-49 have been added. New claims 47-49 recite applying a stress to the claimed material (Claim 1) or device (Claim 12), wherein the stress is applied at a temperature above the glass transition temperature and below the melting point and wherein the external stress is by stretching. Support for new claims 47-49 is found at p. 10, 4-16. No new matter has been added.

Rejection under 35 USC §102

Claims 1-3, 5, 8, 10, 12-16, 19, 22, 40-42 are rejected under 35 USC §102(b) as being anticipated by Kishimoto (4,093,562). Applicants traverse the rejection.

Kishimoto teaches and claims a polymeric composition for manufacture of secondary electron tubes consisting of adding granularly dispersive materials such as carbon, graphite or metal oxides to a polymer matrix, wherein the polymer matrix is an aliphatic polymer (e.g., 7,7,8,8-tetracyanoquinodimethane, polyvinyl chloride, an polyurethane) (col. 3, 35-47, 67 and col. 4, 43) that have a high value of the secondary emission yield. The granularly dispersed materials are added to increase the electrical conductivity of the matrix material (col. 3, 50-65). Moreover, Kishimoto explicitly teaches away from the use of the claimed polymer materials whose conductivity can be attributed to conjugated  $\pi$ -electrons (col. 3, 35-45).

The present invention claims a material for detecting ionizing radiation comprising a  $\pi$ -conjugated material that does not include an added granularly dispersive electrically conductive material.

Finally, insofar as Claim 40, the claim plainly recites that a  $\pi$ -conjugated polymer is disposed between a pair of electrodes having a length greater than the width and that the combination is rolled up the

length to form a cylindrical-shaped structure. As Applicants have shown Kishimoto neither suggests nor teaches the use of a  $\pi$ -conjugated polymer. Moreover, Kishimoto does not teach the claimed device but rather a cylindrical-shaped polymer/granularly dispersive conductive particle combination having electrodes applied to the ends (FIG. 1 and col. 3, 60-65) that has no correspondence to the claimed device.

As Applicants have shown above, Kishimoto not only is directed to an entirely different invention but also teaches away from the claimed invention. It is well settled that anticipation requires that every element and limitation of the claimed invention be found within a single prior art reference. A prima facie case of anticipation not having been made, Applicant requests reconsideration and allowance of claims 1-3, 5, 8, 10, 12-16, 19, 22 and 40-42.

#### Rejection under 35 USC 103

Claims 6-7, 11, 17-18, 23, 24-29 and 33-34 are rejected under 35 USC §103(a) as being unpatentable over Friend (5,523,553) in view of Kishimoto (4,093,562) or the converse. Applicants traverse the rejection.

Friend is directed to a photo detector device comprising a conjugated polymer material disposed between first and second electrodes having different work functions, i.e., the electrodes are compositionally dissimilar (col. 2, 50-55 and Claim 1). The claimed invention claims a  $\pi$ -conjugated material disposed on electrodes, wherein the electrodes are compositionally alike. There is no teaching or suggestion in Friend that the electrodes be alike in composition.

Insofar as the combination of Friend and Kishimoto. As Applicants have shown above, Kishimoto is directed to entirely different invention than claimed and taught by Friend. There is no suggestion in either Friend or Kishimoto that they be combined nor any motivation for doing so. Moreover, because Friend and Kishimoto are different inventions there is no indication that the combination could be made or would be operative if it could be made. Finally, as discussed above, Kishimoto teaches away from the use of  $\pi$ -conjugated materials (col. 3, 35-45).

Based on the argument above, none of the requirements for establishing a prima facie case of obviousness has been met. Namely, that all the claim limitations must be taught or suggested by the prior art and that the prior art must disclose the invention as a whole. Accordingly, Applicants request reconsideration and withdrawal of the rejection of claims 6-7, 11, 17-18, 23, 24-29 and 33-34.

Claims 30-31 are rejected under 35 USC §103(a) over Friend, Kishimoto and Heeger (5,504,323). Applicants traverse the rejection.


The argument hereinabove regarding the application of Friend and Kishimoto to the claimed invention applies here equally. Applicants urge that a prima facie case of obviousness has not been made and request reconsideration and withdrawal of the rejection of claims 30-31.

## CONCLUSION

The rejection of claims 1-3, 5, 8, 10, 12-16, 19, 22 and 40-42 under 35 USC §102 and of claims 6-7, 11, 17-18, 23, 24-29 and 33-34 under 35 USC §103 having been overcome, Applicants request reconsideration and withdrawal of the rejections, entry of new claims 47-52 and that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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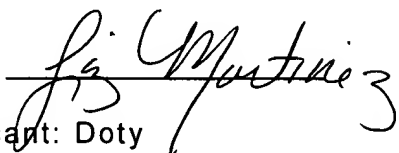
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Application No: 09/863,128

For Applicant: Doty